# TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

WYOMING

SOIL CONSERVATION SERVICE

Biology No. 112

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Subject: NUTTALL'S COTTONTAIL\*

#### General

Nuttall's cottontail (<u>Sylvilagus nuttallii</u>) is commonly found in montane forests and shrublands in Colorado in the ponderosa pine zone and higher in the montane regions in northern New Mexico and the Upper Sonoran, Transition, and Canadian Zones in Wyoming. The density of the Nuttall's cottontail was inversely correlated with altitude between approximately 7,000 and 9,000 ft (2,100 and 2,700 m) elevation in north-central Colorado.

# Food Requirements

Shrubs, cacti, grasses, and herbs were the most frequently consumed foods during the winter in Wyoming. The primary items in the winter diet were the small twigs of Rocky Mountain juniper (<u>Juniperus scopulorum</u>) and the dried seed head stems of sagebrush (<u>Artemsia tridentata</u>) and rabbitbrush (<u>Chrysothamnus spp.</u>). Green plants, primarily wheatgrass (<u>Agropyron spp.</u>), bluegrass (<u>Poa spp.</u>), and needleandthread grass (<u>Stipa spp.</u>) formed approximately 80 percent of the summer diet.



MOUNTAIN COTTONTAIL (NUTTALL 'S)

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\*Information taken from <u>Ecoregion M3113 Handbook</u> and <u>Habitat</u>
<u>Suitability Index Models</u>, Wildlife Species Narratives (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

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# Water Requirements

No information was found in the literature concerning the requirements of the Nuttall's cottontail for free water. Young Nuttall's cottontails may require succulent vegetation in their diets in order to obtain water.

## Cover Requirements

Thickets, brush piles, logs, slab piles, rocky outcrops, and old burrows furnished cover for Nuttall's cottontails in northeastern California and in Wyoming. Sagebrush and curlleaf mountainmahogany (Cercocarpus ledifolus) were used for cover in Wyoming. In northern Colorado between approximately 7,000 and 9,000 ft (2,100 and 2,700 m), the density of Nuttall's cottontails was positively correlated with the abundance of bitterbrush (Purshia tridentata) and herbaceous ground cover and was negatively correlated with the prevalence of common juniper (Juniperus communis) and fallen timber.

# Reproductive Requirements

Nests are made in depressions in grasses, in burrows, or in hollows that have been lined with grasses or evergreen needles and hair. The location of the nest is dependent upon the quality of surface cover available.

### Special Habitat Requirements

No special habitat requirements were found in the literature.

### Interspersion Requirements

The quality of available cover has a strong effect on interspersion during winters with deep snows and cold temperatures. Nuttall's cottontails did not travel farther than 100 ft (30.5 m) from cover during the winter in Wyoming and more often did not exceed 30 ft (9 m). In California, Nuttall's cottontail appeared to be more solitary than most cottontails. This was thought to be due to the uniformity of the sagebrush habitat in which this species was commonly found. The rabbits were relatively congregated in areas with grassy clearings.